

From: "Butner, Gary (CDPH-RHB)" <Gary.Butner@cdph.ca.gov>
To: <susan.durbin@doj.ca.gov>
Date: 8/12/2008 12:38 PM
Subject: FW: Questions for Bob's Talk Tomorrow

-----Original Message-----

From: Greger, Robert (CDPH-DFDRS-RHB)
Sent: Thursday, July 10, 2008 7:13 AM
To: Butner, Gary (CDPH-RHB)
Subject: FW: Questions for Bob's Talk Tomorrow

Another email for Brian Hembacher.

-----Original Message-----

From: Greger, Robert (DHS-RHB)
Sent: Monday, November 25, 2002 11:19 AM
To: 'Barbara Byron'
Subject: RE: Questions for Bob's Talk Tomorrow

Same to you, Thanksgiving that is.

-----Original Message-----

From: Barbara Byron [mailto:Bbyron@energy.state.ca.us]
Sent: Monday, November 25, 2002 11:18 AM
To: RGreger@dhs.ca.gov
Subject: RE: Questions for Bob's Talk Tomorrow

Victor and Bob Halstead were asked to table their detailed technical discussion, since people in our group were beginning to look bored when their discussion carried on and on. The good thing was that the two of them have met and exchanged phone numbers. They have common technical interests and I'm sure they've begun a fruitful discussion and relationship. Bob Halstead is very interested in potential terrorist attacks on spent fuel shipments and the video he showed on a TOW missile hitting a spent fuel cask pleased Victor since it supported his earlier analysis.

One important issue that was raised again was whether Price-Anderson would cover a terrorist attack. The last time I looked, it didn't. We need to follow up on this.

Have a great Thanksgiving, Rob. I'm off after today.

Barbara

>>> "Greger, Robert (DHS-RHB)" <RGreger@dhs.ca.gov> 11/24/02 01:14PM >>>
Did Victor behave himself?

-----Original Message-----

From: Barbara Byron [mailto:Bbyron@energy.state.ca.us]
Sent: Thursday, November 21, 2002 8:37 AM
To: RGreger@dhs.ca.gov

Subject: RE: Questions for Bob's Talk Tomorrow

Thanks. I'm sure it will be fine. A lively discussion is good and we certainly want to point out any weaknesses in their assumptions.

>>> "Greger, Robert (DHS-RHB)" <RGreger@dhs.ca.gov> 11/20/02 03:57PM >>>
I've already politely talked to Victor about this.

-----Original Message-----

From: Barbara Byron [mailto:Bbyron@energy.state.ca.us]
Sent: Wednesday, November 20, 2002 3:32 PM
To: RGreger@dhs.ca.gov
Subject: RE: Questions for Bob's Talk Tomorrow

I'm a little worried about tomorrow, because I think Victor wants to go for the throat on these issues, and the purpose of tomorrow's briefing is just to listen to Nevada's projections of shipments and the basis for their assumptions in their analyses. I don't want to get into a policy debate of what is an acceptable risk. Victor can be very out-spoken. I'll try to keep the meeting cordial.

>>> "Greger, Robert (DHS-RHB)" <RGreger@dhs.ca.gov> 11/20/02 03:28PM >>>
I sense a Victor Anderson here. They're good questions, although presented is a slightly accusatory manner.

-----Original Message-----

From: Barbara Byron [mailto:Bbyron@energy.state.ca.us]
Sent: Wednesday, November 20, 2002 1:47 PM
To: jstrolin@govmail.state.nv.us
Subject: Questions for Bob's Talk Tomorrow

Hi Joe,

We really appreciate that you and Bob are coming to Sacramento tomorrow to talk to our group on potential shipments to Yucca Mt. through California. There's a lot of interest in Bob's presentation and a few questions have been raised that are listed below.

1. Potential Routine Radiation Exposures:

- The assumption that the dose rate will be 10 mrem/hr from the surface of the vehicle is based on maximum limits allowed by 10 CFR 71.47. What studies indicate that this will be the actual case for all shipments?
- The first three bullets of this slide appear to be predicated upon a uniform dose of 10 mrem/hr at two meters in all directions from the

vehicle.

In fact, radiation fields from a shielded spent fuel bundle or bundles unlikely will be uniform. Please provide details that show that these dose projections take into account variation in radiation fields.

- Can you provide a copy of the source document for these values? Were these doses predicated on the highest dose rate? Did the person doing the calculations simply use inverse square (e.g., point source geometry) or were sophisticated models used?

2. Consequences of Credible Severe Accident

- What fire accident could breach a spent fuel cask, resulting in sufficiently high temperatures to melt the cask walls?

- What atmospheric models were used to justify the transport of heavy metals over 32 square miles?

- The claim of 200 - 1,400 cancer deaths within the first year is counter to studies on the effects of cancer induction by radiation. The shortest period of time is about 10 years and more typically the manifestation is 20 to 30 years post exposure. Please provide the studies or basis for this claim.

3. Consequences of Successful Terrorist Attack

- Can you please explain how this release will spread far enough to yield a population dose of 96,000 person-rem? Unless a large amount of explosive is used, the cask will not be totally destroyed and a 100% release of radioactive material will not occur. Considering that you have heavy metals that are vaporized, then leaving a high temperature area and going into a low temperature area, condensation will occur quickly. This means a small fallout (deposition) track and little if any airborne radioactivity that can be inhaled. Please explain the large population dose in light of these facts.